

EC 639

303639

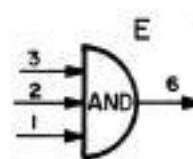
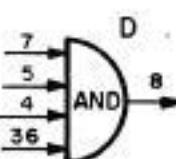
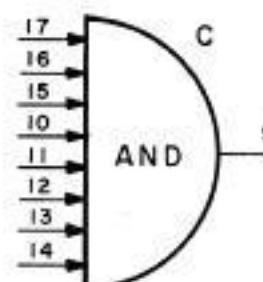
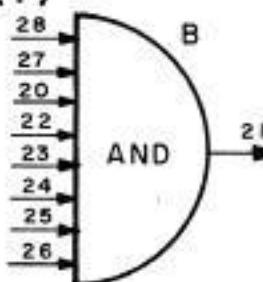
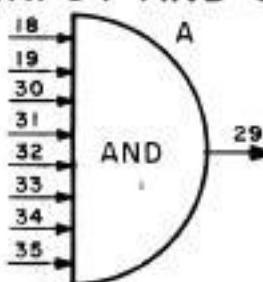
## 8 INPUT AND GATE (3)

## 4 INPUT AND GATE (I)

## 3 INPUT AND GATE (I)

CIRCUIT BOARD EC639

## SYMBOL

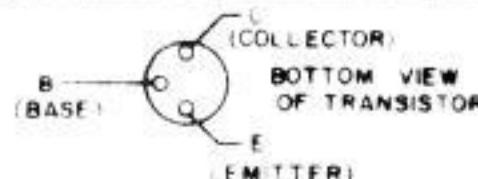


NOTE: WHEN USED AS "FAN-OUT" GATE, "AND" IS REPLACED BY "F/O" IN SYMBOL

WHEN TWO OR MORE GATES ARE TIED TOGETHER ONE SYMBOL CAN BE USED SHOWING PROPER TERMINAL DESIGNATIONS.

— 30270 —

REFER TO S-5500 FOR BASIC MARKING INFORMATION



FIVE "AND" GATES ARE PROVIDED, THREE HAVE 8 INPUTS, ONE HAS 4 INPUTS, AND ONE HAS THREE INPUTS ALL GATES FUNCTION IDENTICALLY. A -6 VOLT LEVEL ON ANY INPUT RESULTS IN A -6 VOLT OUTPUT FROM THE CORRESPONDING GATE. WHEN ALL INPUTS TO A PARTICULAR GATE ARE AT 0 VOLTS, THE CORRESPONDING OUTPUT IS 0 VOLTS. AN EXTERNAL BIAS RESISTOR TO +6 VOLTS IS REQUIRED. WHEN USED AS A "FAN-OUT" GATE, THE OUTPUT OF THE "AND" GATE BECOMES THE INPUT OF THE "FAN-OUT" GATE AND THE INPUT OF THE "AND" GATE BECOMES THE OUTPUT OF THE "FAN-OUT" GATE. WHEN INPUT OF THE "FAN-OUT" GATE IS 0 VOLTS ALL OUTPUTS ARE 0 VOLTS. WHEN THE INPUT IS -6 VOLTS ALL OUTPUTS ARE ISOLATED FROM EACH OTHER.

**A**

|    |     |    |
|----|-----|----|
| 18 | CRI | 29 |
| 19 | CR2 |    |
| 30 | CR3 |    |
| 31 | CR4 |    |
| 32 | CR5 |    |
| 33 | CR6 |    |
| 34 | CR7 |    |
| 35 | CR8 |    |

**B**

|    |      |    |
|----|------|----|
| 28 | CR9  | 21 |
| 27 | CR10 |    |
| 20 | CR11 |    |
| 22 | CR12 |    |
| 23 | CR13 |    |
| 24 | CR14 |    |
| 25 | CR15 |    |
| 26 | CR16 |    |

**C**

|    |      |   |
|----|------|---|
| 17 | CR17 | 9 |
| 16 | CR18 |   |
| 15 | CR19 |   |
| 10 | CR20 |   |
| 11 | CR21 |   |
| 12 | CR22 |   |
| 13 | CR23 |   |
| 14 | CR24 |   |

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graph LR
    D[D] --- 3[3]
    D --- 6[6]
    D --- 7[7]
    D --- 5[5]
    D --- 4[4]
    E[E] --- 3[3]
    E --- 2[2]
    E --- 1[1]
    E --- 8[8]

```

D

E

ALL DIODES ARE D2

R.W. Voight